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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Feder et al.

Serial No.: To be assigned Group Art Unit: 1653

Filed: herewith Examiner: Gupta, A.

For: PEPTIDES AND PEPTIDE ANALOGUES Attorney Docket No.: 8907-091-999

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INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure provisions of 37 C.F.R. §1.56, there is hereby provided certain information which the Examiner may consider material to the examination of the subject U.S. patent application. It is requested that the Examiner make this information of record if it is deemed material to the examination of the application.

- 1. Enclosures accompanying this Information Disclosure Statement are:
 - 1a. \boxtimes A list of all patents, publications, applications, or other information submitted for consideration by the office.

1b. A legible copy of:

- ☐ Each U.S. patent application publication and U.S. and foreign patent;
- □ Each publication or that portion which caused it to be listed on the PTO-1449;
- For each cited pending U.S. application, the application specification including the claims, and any drawing of the application, or portion of the application which caused it to be listed on the PTO-1449 including any claims directed to that portion;
 - all other information or portion which caused it to be listed on the PTO-1449.
- An Finglish language copy of search report(s) from a counterpart foreign application or PCT International Search Report.
- 1d.

 Explanations of relevancy (ATTACHMENT 1(d), hereto) or English language abstracts of the non-English language publications.
- 2. U This Information Disclosure Statement is filed under 37 C.F.R. §1.97(b):
 - □ Within three months of the filing date of a national application other than a continued prosecution application under §1.53(d);
 - □ Within three months of the date of entry of the national stage as set forth in §1.491 in an international application;

		☐ Before the mailing of the first Office action on the merits;								
			fore the mailing of a first Office action after the filing of a request for continued amination under §1.114.							
3.		This Information Disclosure Statement is filed under 37 C.F.R. §1.97(c) after the period specifin 37 C.F.R §1.97(b), but before the mailing date of any of a final action under 37 C.F.R. §1.11 a notice of allowance under 37 C.F.R. §1.311 or an action that otherwise closes prosecution in application.								
	(Check either Item 3a or 3h)									
	3a.		The Certification Statement in Item 5 below is applicable. Accordingly, no fee is required.							
	3b.		The \$180.00 fee set forth in 37 C.F.R. §1.17(p) in accordance with 37 C.F.R. §1.97(c) is: □ enclosed □ to be charged to Pennie & Edmonds LLP Deposit Account No. 16-1150.							
		(Item 3	(Item 3b to be checked if any reference known for more than 3 months)							
4.			formation Disclosure Statement is filed under 37 C.F.R. §1.97(d) after the period specified C.F.R. §1.97(c), but on or before the date of payment of the issue fee.							
	The \$180.00 fee set forth in 37 C.F.R. \$1.17(i)(1) is: enclosed. to be charged to Pennie & Edmonds LLP Deposit Account No. 16-1150.									
	The Certification Statement in Item 5 below is applicable.									
5.										
(Check either Item 5a or 5b)										
	5a.		In accordance with 37 C.F.R. §1.97(e)(1), it is certified that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.							
	5b.		In accordance with 37 C.F.R. §1.97(e)(2), it is certified that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, was known by any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the films of this Information Disclosure Statement							
6.	⋈	This ap	plication is a continuation application under 37 C.F.R. 81.60 or 81.53(b) or (d).							
			(Check appropriate Items 6a. 6b and/or 6c)							
	6a.	Ω	A Petition to Withdraw from issue under 37 C.F.R. §1.313(b)(5) is concurrently filed herewith.							

6b. Copies of publications listed on Form PTO-1449 from prior application Serial No. 09/216,077, filed on December 18, 1998, of which this application claims priority under 35 U.S.C. §120, are not being submitted pursuant to 37 C.F.R. §1.98(d). Copies of the publications listed on Form PTO-1449 were not previously cited in prior 6c. application Serial No., filed on, and are provided herewith. This is a Supplemental Information Disclosure Statement. (Check either Item 7a or 7b) 7a. This Supplemental Information Disclosure Statement under 37 C.F.R. §1.97(f) supplements the Information Disclosure Statement filed on ___. A bona fide attempt was made to comply with 37 C.F.R. §1.98, but inadvertent omissions were made. These omissions have been corrected herein. Accordingly, additional time is requested so that this Supplemental Information Disclosure Statement can be considered as if properly filed on ___. 7b. This Supplemental Information Disclosure Statement is timely filed within one (1) month of a PTO Notice under 37 C.F.R. §1.97(i). ☐ In accordance with 37 C.F.R. §1.98, a concise explanation of what is presently understood to be the relevance of each non-English language publication is: (Check Item 8a, 8h, or 8c) 8a. satisfied because all non-English language publications were cited on the enclosed English language copy of the PCT International Search Report or the search report from a counterpart foreign application indicating the degree of relevance found by the foreign office. 8b. set forth in the application. 8c. enclosed as an attachment hereto. The Commissioner is authorized to charge any additional fee required or credit any overpayment for this Information Disclosure Statement and/or Petition to Pennie & Edmonds LLP Deposit Account No. 16-1150. No admission is made that the information cited in this Statement is, or is considered to be, material to patentability nor a representation that a search has been made (other than a search report of a foreign counterpart application or PCT International Search Report if submitted herewith). 37 C.F.R. §§1.97(g) and (h).

Respectfully submitted.

Date Chry 1, con

For Brian M. Poissant (Reg. No. 28,462) PENNIE & EDMONDS 11P 1155 Avenue of Americas New York NY 10036-2720 (212) 790 - 9090

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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)											
	Dadone et al., 1982, "Analysis of laboratory expression of the disease by genotype in 18 pedigrees", AM. J. Clin. Pathol. 78:196-207										
	АВ	Edwards et al., 1988, " Prevalence of Hemochromatosis Among 11,065 Presumably Healthy Blood Donors", N. Engl. J. Med. 18:1355-1362									
	AC	Feder et al., 1998, "The hemochromatosis gene product complexes with the transferrin receptor and lowers its affinity for ligand binding", <i>Proc. Natl. Acad. Sci. U.S.A.</i> 95:1472-1477									
	ΑD	Feder et al., 1996, "A novel MHC class I-like gene is mutated in patients with hereditary hemochromatosis", Nature Genetics 13:399-408									
	ΑE	Feder <i>et al.</i> , 1997, "The hemochromatosis founder mutation in HLA-H disrupts beta2-microglobulin interaction and cell surface expression", <i>J. Biol. Chem.</i> 272: 14025-14028									
	AF	Gross <i>et al.</i> , 1998, "Co-trafficking of HFE, a nonclassical major histocompatibility complex class I protein, with the transferrin receptor implies a role in intracellular iron regulation", <i>J. Biol. Chem</i> 273:22068-22074									
	AG	Kosbor <i>et al.</i> , 1983, "The production of monoclonal antibodies from human lymphocytes", <i>Immunology Today</i> 4:72									
	АН	Lebron et al., 1998, "Crystal structure of the hemochromatosis protein HFE and characterization of its interaction with transferrin receptor", Cell 93:111-123									
	AI	Molaren et al. 1995. "Prevalence of heterozygotes for hemochromatosis in the white population of									
	Sampietro <i>et al.</i> , 1998, "High prevalence of the His63 Asp HFE mutation in Italian patients with porphyria cutanea tarda", <i>Hepatology</i> 27.181-184										
	Δħ	Stagsted et al., 1993, "Amino acid residues essential for biological activity of a peptide derived from a major histocompatibility complex class Lantigen", <i>Proc. Natl. Acad. Sci. U.S.A.</i> 90,7686-7690									
	AL	Stagsted <i>et al.</i> , 1990, "Regulation of insulin receptor functions by a peptide derived from a major histocompatibility complex class I antigen", <i>Cell</i> 62:297-307									
	АМ	Van Landeghem <i>et al.</i> , 1998, "Interaction between haemochromatosis and transferrin receptor genes in multiple myeloma", <i>Lancet</i> 352:1285-1286									
	Yaouanq et al., 1997, "Hemochromatosis Cys282Tyr mutation in pyridoxine-responsive sideroblastic anaemia", Lancet 349:1475-1476										
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	AP	WO 97/38137	10/16/97	PCT (Mercator Genetics Inc.)			_	<u> </u>				
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